



# Synthetic Rope Repair

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## TOOLS:

- [A glass or container \(without lid\) of water \(1\)](#)
- [A lighter or matches. \(1\)](#)
- [An adult \(if you are a kid like me\). \(1\)](#)
- [A pair of scissors. \(1\)](#)



## PARTS:

- [A synthetic rope with frayed ends. \(1\)](#)

## SUMMARY

My aunt gave me a knot-tying set this Christmas (2010). I constantly played with it and within 2 days, the rope was badly frayed. That shows how quickly rope frays and how much you need our technique. Frayed rope is difficult to use, but it's quick and easy to repair the damaged ends so you can use the rope again. It's so easy, I am only ten and (with some help from my dad on step 2) I can do it in under 1 or 2 minutes every time. Using our technique is a simple way to save time and money and is (relatively) safe!

## Step 1 — Clean Cut

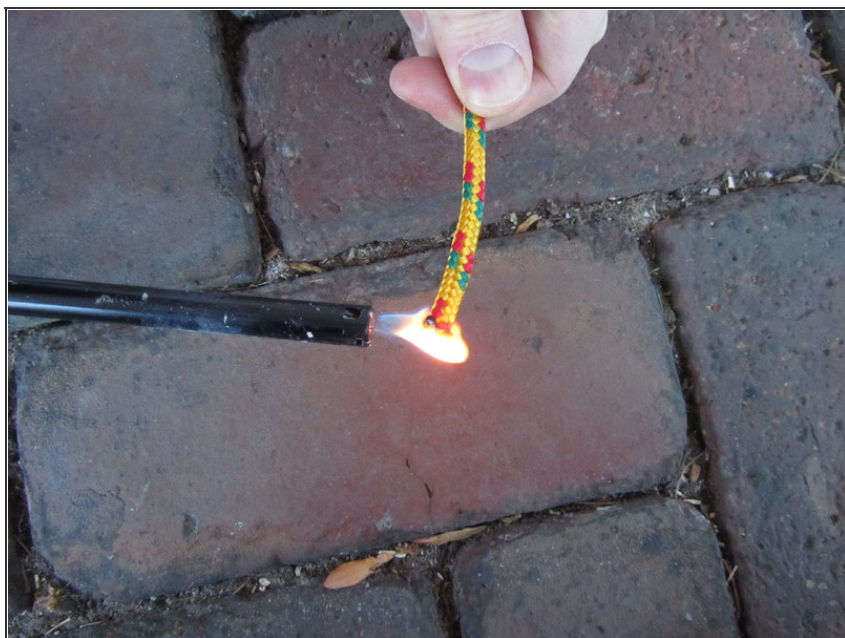


- Cut off the frayed end of the rope with your scissors. Make the cut as clean as you can. The straighter and cleaner the cut, the smoother the end of the rope will be when you're done.

## Step 2 — A Quick Tip (optional)

- For ropes with woven nylon on the outside and an inside core, you'll need to pull out the inside in order to better seal the ends of the rope. Pull about 1 in. of the inside core out, cut it 1/2 in. from the end, and work it back in by holding one end of the rope and sliding the outside nylon part back over the end of the core. Then, proceed on to the next step.

### Step 3 — Melting the Rope



- Once you have made a clean cut, hold the flame of your match or lighter (we used a lighter) up to the end of the rope for 3-6 seconds.

- Tip: Have your glass or other container of water ready -- the rope will smolder or burn.



- Caution: This technique should not be used on ropes made with natural fibers as it is unlikely to solve the problem and may catch the rope on fire. Rope made with natural fibers tends to burn, while synthetic rope will melt. However, if there is a small flame on the end of your synthetic rope, don't be alarmed. That happens very often, and is generally unavoidable.



## Step 4 — Cooling Off



- Quickly douse the burned or melted end in a glass or container of cool water.
- Tip: Immediately after removing the rope from the flame, dip it in the water. Otherwise, it will continue to smolder and may drip melted fibers on your working surface.



## Step 5 — Finished Product



- This is the end of the rope we repaired. We have done it many times, and every time we did it, it worked perfectly. It is a very efficient and cost-effective way of repairing the frayed ends of a synthetic rope.

Compare the first and last pictures to see how effective this technique is. We find it easy to repair nylon rope in a few simple steps. We hope you do too.

PS: I'm only ten, and this is my first project. I hope you like it.

